



THE CLAIMS:

48-63 (Canceled)

64 (previously canceled)

65-81 (Canceled)

82. (New) A method of improving pregnancy rates in a non-human mammal, comprising:

culturing adult fibroblast donor cells in serum starved media;

passaging the cells between about 10 and about 15 passages;  
nuclear transferring the donor cells into enucleated recipient oocyte cells to promote cell fusion and embryo formation;

culturing nuclear transferred embryos in serum supplemented media to form blastocytes; and

transferring the blastocytes into a recipient non-human mammal wherein pregnancy rates are up to at least about 64% based on the number of embryo recipients.

83. The method of claim 82 wherein the fibroblast cells are obtained from an aged non-human mammalian donor.

84. The method of claim 83 wherein the aged donor is a bovine.

85. The method of claim 83 wherein the aged donor is male.

86. The method of claim 84 wherein the aged donor is 17 years old.

87. The method of claim 82 wherein the serum starved media contains up to 0.5% serum.

88. The method of claim 82 wherein the passaging is 10 passages.

89. The method of claim 82 wherein the passaging is 15 passages.

90. The method of claim 82 wherein the serum supplemented media is about 10% serum.

91. A method of preparing a long term fibroblast cell population, comprising:  
  
passaging donor fibroblast cells from an adult non-human mammal for about 10 to about 15 passages in serum starved media containing up to 0.5% serum; and  
  
selecting a population of cells identified as about 10-15  $\mu\text{m}$  in diameter and smooth membrane surfaced wherein said cells comprise a long term fibroblast cell population exhibiting delayed senescence.
92. The method of claim 91 wherein the donor cell is obtained from a male mammal.
93. The method of claim 91 wherein the passaging is 10 passages.
94. The method of claim 91 wherein the passaging is 15 passages.
95. A method of preparing somatic cells having improved genetic totipotency, comprising:  
  
successively culturing non-embryonic somatic cells in serum deprived media containing up to 0.5% serum for at least 5 passages prior to genetic manipulation of the cells.